



# TB CARE I DOMINICAN REPUBLIC

Year 1

Annual Report

April 1, 2011 – April 30, 2012

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## **List of Abbreviations**

AIDS Acquired Immune Deficiency Syndrome

ACSM Advocacy, Communication and Social Mobilization

CENISMI National Center for Research on Mother and Child

CDC Centers for Disease Control and Prevention

CBO Community Based Organization

DAS Dirección de Area de Salud (Health Area Direction)

DOTS Directly Observed Treatment Short-Course

DPS Dirección Provincial de Salud (Health Province Direction)

DRS Dirección Regional de Salud (Regional Health Direction)

HCW Health Care Worker

HIV Human Immunodeficiency Virus

IC Infection Control

INTEC Instituto Tecnológico de Santo Domingo

KNCV Tuberculosis Foundation

NTP National Tuberculosis Program

N/A Data Not Available, Not Applicable

NGO's Non-Governmental Organization

MDR Multidrug Resistant Tuberculosis

M&E Monitoring and Evaluation

OR Operations Research

PMDT Programmatic Management of Drug Resistant TB

PPM Public-Public and Public-Private Mix

PROMESE/CAL Essential Drugs Program

TA Technical Assistance

USAID United States Agency International Development

# **Executive Summary**

The current report provides a summary of the implementation of the TB CARE I project in the Dominican Republic during the period of April 1st 2011 to April 30th 2012. Following the success of the Tuberculosis Control Assistance Program (TB CAP 2009-2010)<sup>1</sup>, TB CARE I is currently one of the main donors for the National TB program together with the Global Fund.

The TB CARE I project in the Dominican Republic focuses on five priority Technical Areas:

- 1. Universal and Early Access
- 2. Infection Control (IC)
- 3. Programmatic Management of Drug Resistant TB (PMDT)
- 4. Health Systems Strengthening
- 5. Monitoring & Evaluation (M&E), Operations Research (OR) and Surveillance

These Technical Areas were selected along with the National TB Program (NTP) according to the identified needs of the country. As a result, TB CARE I contributes by filling identified gaps, improving the implementation of the comprehensive Stop TB Strategy at all levels.

The project, implemented by KNCV Tuberculosis Foundation (KNCV), partners with different local agencies and NGO's to achieve the goals, including the NTP at different levels (DAS, DPS, DRS), The Global Fund TB Project, Profamilia, INTEC, CDC, National Postal Service, National Council on HIV and AIDS, among others.

The geographic coverage of the project reaches 12 prioritized provinces and the eight Health Areas of the capital Santo Domingo, from which more than 80% of all TB cases are reported.

This report provides a summary of the program's contributions towards USAID's targets and expected outcomes, as well as results achieved to date through 15 project's indicators that reflect the effect of the activities implemented in 12 priority provinces (out of the total of 32) and the 8 health areas of Santo Domingo.

**Universal and Early Access:** The most significant outcomes of the project are related to this technical area. The comprehensive, focused and evidence based approach of ACSM and PPM in priority high burden TB areas with vulnerable populations, has significantly contributed to raise awareness, and decrease stigma. The development of 42 action-oriented Stop TB committees composed of representatives of different active community groups and the collaboration with pharmacies increased referral of TB suspects. 13 out of 20 provinces and areas have their Stop TB committees formed. The total number of TB suspects and cases referred in project provinces and areas of Santo Domingo is 45,774 and 3,591 respectively. Pharmacies referred 63 suspects, which included 9 cases; shopkeepers referred 12 TB suspects with no positive TB cases. Communities referred 828 TB suspects, among which 78 were diagnosed as TB cases. The community and pharmacy contribution to detection is not overall well registered yet. Integration of the community TB referral system, making use of laboratory, outpatient clinic register and TB register, and inclusion in the regular national TB registration system will allow to improve M&E of the community and PPM contribution and show impact of these strategies.

**Infection Control (IC):** The approach in this technical area has gone from basic infection control measures to a more comprehensive one, including the sensitization, training and mentoring of Infections Control Committees, integrated by 70 HCWs and the refurbishment or renewal of physical

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<sup>&</sup>lt;sup>1</sup> TB CAP was implemented from 2005-2010 worldwide.

areas of 5 TB services within major and key public care centers. A notable challenge is the need of more information to estimate the impact of TB in HCWs.

**Programmatic Management of Drug Resistant TB (PMDT):** The updated guidelines for MDR Treatment, Care and Support were developed with financial support and technical assistance from the project. At the beginning of the project, following recommendations from the NTP MDR Technical Team, the use of GeneXpert was recommended. However during the latest international evaluation where also CDC participated, it was decided together with NTP that the country had no conditions yet to change to such technology and it would not be cost effective under current circumstances. Other relevant issues for PMDT are still under discussion with NTP and GF such as financial sustainability of 3<sup>rd</sup> line drugs, patients' adherence, and an efficient flow of culture samples and results.

**Health Systems Strengthening:** During TB CAP and TB CARE I, the project has contributed to the performance of (TB) health workers by providing supervision to provinces and selected facilities. A considerable contribution has been given also through trainings nationwide at all levels to update in all components of the Stop TB Strategy using a highly participative methodology and focusing also on managerial and technical aspects. The proportion of regional directors, provincial and health areas who elaborate TB annual action plans based on situational analysis out of all trained directors is 75%. Raising awareness at political level through the Photovoices Exhibition, produced by (ex) TB patients, has opened doors for collaboration and action with other partners, including other governmental agencies, the Congress and private sector. Through this strategy TB also gained attention in the public agenda.

**Monitoring & Evaluation (M&E), Operations Research (OR) and Surveillance:** The project continues to contribute to the improvement of the quality of data and the use of the TB information system at regional and provincial level. Nine periodical sessions of data analysis in provinces and areas have been held during the year and again during TB CARE I an annual epidemiological bulletin has been published as feedback to the provinces. There are however still challenges in timely and quality reporting of provinces and compilation at national level as well as giving feedback to the local and provincial level, which delays the publication of the epidemiological bulletin as it has been proposed.

TB CARE I has provided TA in the various components of the project to other partners in the country, which is part of the reason why the technical team is invited to the different technical groups of the NTP. The project has received valuable TA from KNCV HQ, providing mentorship to young professional members of the local staff and contributing to the planning and implementation of the project's main activities. Particularly in innovative interventions of ACSM and PPM the country had no former experience. After some pilots in urban and rural settings now evidence is growing of the impact of these interventions to increase detection, decrease stigma and improve quality patient centered care.

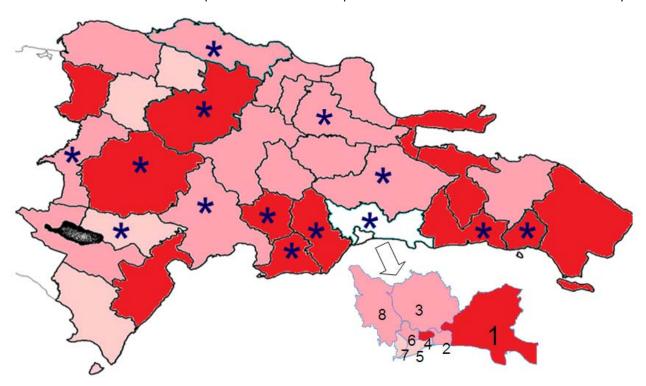
## Introduction

TB CARE I has been implemented in the Dominican Republic by KNCV since April 2011. Following the guidelines of the Global Stop TB Strategy, the work plan was developed in five of the eight TB CARE I Technical Areas:

- Universal and Early Access
- Infection Control (IC)
- Programmatic Management of Drug Resistant TB (PMDT)
- Health Systems Strengthening
- Monitoring & Evaluation (M&E), Operations Research (OR) and Surveillance

These five components respond to specific gaps identified during discussions with NTP and based on the outcomes of the regular USAID funded international evaluations. Laboratories, TB/HIV and drug supply & management were not covered by TB CARE I-Dominican Republic in Year 1 as these areas are addressed by other partners or the government itself.

Innovative initiatives were conceived as part of the project to be implemented for a total amount of USD 1.182.907 in 12 provinces and eight health areas in the country capital: Santo Domingo, San Cristobal, San Pedro, La Romana, Barahona, Bahoruco, Elías Piña, San Juan de la Maguana, Azua, Peravia, Monte Plata, Santiago, Puerto Plata and the National District, plus Health Areas I, II, III, IV and V of the metro area. These provinces and Areas report around 80% of all TB cases in the country.



Legend:

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TB CARE I Provinces and Areas

Level of TB prevalence in the area, from high to low

Map of the country, showing the most affected provinces by the epidemic and the TB CARE - supported provinces.

The implementing Partner, KNCV, coordinates and partners with different governmental and non-governmental institutions and CSO's to achieve the goals, including MoH and NTP at different levels, The Global Fund TB Project, Community Based Organizations, INTEC, CDC, Corporate Industrial sector, National Postal Service, National Council on HIV and AIDS, and Profamilia among others.

The Strategic TB Plan 2011-2015 prioritizes the need to increase access to care for the poorest populations, as well as promotional, preventive and curative services emphasizing primary health care, with the aim to reduce social exclusion. In the context of Health Reforms (since 2001) decentralized health structures have been put in place changing roles and responsibilities and introducing new players to guarantee the quality of care and implementation of the programmatic norms and regulations of all health programs. The organization of supervision have changed given room for improved quality at health facility level and the increased presence of permanent health teams at the lowest Primary Health Care level composed of medical doctor, nurse and health promoter opens opportunities to improve quality of care including TB and HIV services. The project has included these new players in their training activities to update all components of the Stop TB strategy and in the supervision activities (regional and provincial levels).

# **Universal Access**

The project has a combined approach using the Stop TB Strategy to integrate and improve the clinical TB care together with the mobilization of the community and increase their awareness as well as improve their (TB) health seeking behavior. The Social Mobilization activities were mainly focused on the formation of Community Stop TB Committees through 3 different developed models: rural and urban community and municipality level. The community based committees started at urban level as a pilot in the slum areas of Santo Domingo and were expanded to other urban and also rural areas. The initiative starts from the CBOs themselves involving the health care providers and TB coordinators of their health area. The Municipality model starts at municipality level as an initiative of the Medical Team of the Municipality mobilizing the PHC units falling under their jurisdiction. Each PHC unit mobilizes their community Stop TB team (more "top down"), and finally if most municipalities have their committees formed they establish the Provincial Stop TB committee. All these structures have their own action plan. The committees are the platform to support and sustain TB awareness and change individual and social behavior around TB (decrease stigma) as well as promotion of early case finding within the communities. Different kinds of Community Based Organizations, opinion leaders, schools are involved and the recent establishment of toll free TB hotline strengthens these initiatives to raise public awareness. Besides these community committees the project also started last year to promote and develop Hospital Stop TB Committees which are led by health staff as a comprehensive initiative of Infection Control and empowerment of health care workers. The table shows progress of the Stop TB committees and where hospital committees are concerned; there are now 3 hospital committees and 2 more are being formed and will be ready by APA-2.



Community Stop TB Committee

Stop TB Committee Model	Number of Committees	Members at the end of Year 1	Leading partners	Provinces	Remarks
Urban, community committee	18	659 members	Communities	Santo Domingo, DN	Gradual process where a small group of CBOs and schools mobilizes others and undertake many different creative activities to create awareness of TB (snow ball effect). Activities are year round, not only WTB day and CBOs use referral forms for active case finding
Rural community committee	7	268 members	Communities	Elías Piña, Azua, Neyba	
Hospital Committee	3	231 members	Health staff	Maternity Hospital Nuestra Señora de la Altagracia, Military Hospital Hospital Municipal de Bánica.	Intramural approach, the members are health staff of health facilities. They undertake IC interventions as well as IEC activities for early case finding, stigma reduction and IC inside the facilities
Municipal Committee	14	428 members	Communities	-Hondo Valle -Bánica -Comendador -Los Ríos -Villa Jaragua -Neyba -Padre Las Casas -Guayabal -Pueblo Viejo -Sabana Yegua -Yamasá -Bayaguana -Monteplata -Sabana Grande de	Here all the PHC units with their committee are united within the Municipal committee
Total	42	1,586		13 provinces.	

The PPM component of the project involves pharmacy staff and corner store shopkeepers after previous training to refer TB suspects through a specific referral system and supported by specific promotion materials.

The Technical Assistance given by KNCV HQ ACSM expert, Dr. Netty Kamp, has been essential in the development of these interventions, the search for the evidence base and documentation as well as the guidance for the implementation, which is an example of a comprehensive strategy integrating an empowered community with the health services.



# **Technical Outcomes**

	Expected	Outcome	Indicator	Baseline	Target	Result	Comment
	Outcomes	Indicators	Definition		Y1	Y1	s
1	Reduce delays in the diagnosis of TB	Number of suspects and TB cases detected in project provinces and areas of Santo Domingo	Number of suspects and TB cases detected in project provinces and areas of Santo Domingo	data selected provinces and areas 2010=43, 233 suspects and 3,414 cases	44,233 TB Suspects and 3,482 TB Cases	45,774 TB Suspects and 3,591 TB cases.	NTP estimated to reach 2% of the TB Suspects at national level and 5% in the project's selected provinces.
2	Involve pharmacies/ shopkeepers (colmados) in detection and early referral of suspects	Contribution of pharmacies and shopkeepers to suspect referral and case detection	Number of suspects received in health facilities referred by pharmacies or shopkeepers divided by total referred suspects x 100%. Number of pharmacies/shopke epers referred TB cases/total received cases x 100%.	100 referrals/x by farmacias 30/x Referrals by colmados	200 referrals by Pharmacies; and 60 referrals by shopkeepers	Pharmacies: 205 referrals with 17 cases; Shopkeeper: 12 Referrals with 0 cases.	People rather go to the pharmacy as there are many in urban areas. It might be different in rural settings. Shop keepers are not too focused on care giving and more "commerci al" which might make them less motivated to refer.
3	Involve community in detection and early referral of suspects	Contribution of community to suspect referral and case finding	Number of suspects received in health facilities referred by community members divided by total referred suspects x 100%. Number of community referred TB cases/total received cases x 100%.	number of referrals? 5 TB cases/x	500 referrals by community	464 referral by community with 32 cases	

#### **Key Achievements**

One of the main focuses of the project has been to improve early case detection by implementing a innovative comprehensive strategy that involves community leaders, corner shops and pharmacies, schools and empowering TB patients (Photovoices), which has proven to have a positive impact in the targeted geographic areas.

Following the example of TB CAP/TB CARE I's pilot of the Community Stop TB Committee in the marginalized population of Area 4, the project has expanded, often times on request of other Urban Health Areas of Santo Domingo as well as provinces, to a total of over 35 Community Stop TB Committees. TB CARE I has mobilized communities in collaboration in straight collaboration with the local TB coordinators and built local capacity to establish these committees contributing to proper health seeking behavior and increasing access to



Mural Paintings made by Secondary Schools Students

diagnostic TB services to most at risk populations. The expansion of Community Stop TB Committees to the southern provinces and some bordering with Haiti are extremely important as they have the poorest and most vulnerable population of the Dominican Republic. Also the Hospital Stop TB Committee created within the biggest public hospital in the country (Hospital José Ma. Cabral y Baez) and having a high percentage of health care staff affected by TB (17 cases of TB, 2011) is an important achievement of the project. This Committee has realized the refurbishment of the space where TB services are implementing state of the art IC measures.

Through the integration of 1,526 people in 42 Community Stop TB Committees (23 in urban areas, 11 in rural areas and 3 in hospitals) involved in behavior change activities and TB suspect referrals within the communities the project has contributed 828 referrals of TB suspects of which 78 where TB cases. In addition the alliance with more than 300 Pharmacies and corner shops, added over 200 more TB suspects referrals. Pharmacist and shop keepers were trained to identify TB suspects and refer them to the TB services in the communities. Specific promotional materials were developed and distributed among participating pharmacies and corner stores.



Opening of Exhibition "Invisibles" at National Congress Chamber National Congress

In the highest burden urban neighborhoods of Santo Domingo the TB CARE I team mobilized 30 secondary and primary schools to engage in the fight of TB and early identification of TB suspects, as well as peer educators and multipliers in their families; these mobilized school children supported their communities with TB mural paintings at their school walls and health facilities. They were also encouraged to develop other artistic manifestations, such as songs and dramas, presented as the main performances at the official ceremony of the World TB day 2012.

A powerful initiative for advocacy and patient empowerment has been the production of Photovoices. Using a coaching methodology, a group of TB patients developed a photo collection to tell their stories and to raise awareness on the human suffering of TB and create a human face among the general population. Photovoices was also used as an advocacy tool for the political and decision making level. The Exhibition "Invisibles: the naked truth of TB" has been shown at the Ministry of Culture, Ministry of Health and the National Congress. The Minister of Health reinforced the importance of this exhibition and encouraged the travelling of it to all provinces country wide as well as the President of the Health Commission of the Congress who showed high commitment to contribute to this tour. To date, 4 ministers, 8 congressmen, delegations from USAID, USA and The Netherlands Embassies as well as hundreds of students and general public have attended the Exhibition. All media have covered the different events.

TB CARE I and NTP initiated the collaboration with the Government's existing toll free Hotline to include basic information on TB and where to go for diagnosis and treatment. All TB IEC materials produced by any partner will include the reference to the Hotline. Access to information to the general public has increased considerably through this medium.

During World TB Day the Ministry of Health recognized the contribution of TB CARE I to the Response to TB as support to the NTP. The central event took place at one of the public schools involved in the TB CARE I mural painting activity to create awareness.



Hotline staff now including TB information

#### **Challenges and Next Steps**

Consolidate the models of Stop TB Committees: The major challenge remains the collection of data from the local TB coordinators and health facilities in order to measure impact. The regular recording and reporting system is not systematically used for this purpose although the TB CARE I project has put in place an appropriate referral system, which permits the collection of the data when suspects and patients are referred to the health services. Conversations have started with partner CDC with the assignment to strengthen the NTP's (electronic) Information System and to consider the inclusion of the origin of referrals in the system (community and private providers) in order to measure their contribution and provide feedback.

Another challenge is to sustain the pharmacies' and shopkeepers' involvement to continue referring TB suspects even after closing of the project accompanied by supervision and follow up of the TB coordinators at provincial, area and regional level. The project will seek also partnership with PROMESE CAL which is the Public Pharmacies Network in order to address sustainability.

Authorities of Areas and Provinces that have not formed Stop TB committees will be encouraged to involve their communities following the successful examples in the project areas. In addition, TB coordinators at selected areas and provinces will be approached to further develop Stop TB and IC committees in large hospitals and private medical centers to involve them in active TB suspects case detection and infection control while involving patients.

The integration of the ACSM interventions developed by TB CARE I into the NTP's ACSM interventions funded by Global Fund still remains a challenge and is an ongoing process. The guidelines of the methodologies of community involvement, being the three models of Stop TB committees to increase case detection and TB awareness are being elaborated.

## **Infection Control**

Most of the healthcare facilities were built without taking infection control measures into consideration. TB CARE I has supported the following interventions: 1) Development of Infection Control action plans and follows up of implementation in 5 project selected sites, 2) The training of 70 key staff, aiming to contribute to infection control efforts within healthcare facilities and 3) Five sites have been refurbished during APA-1, including two major hospitals: Maternidad Nuestra Señora de la Altagracia (the largest maternity hospital in the country) and Hospital José María Cabral y Báez (the largest public hospital of the country).

Additional communication activities focusing on active case finding at health facility level were organized with the committed HCWs at nine healthcare sites (not only where IC plans were implemented) through the implementation of the "Quick Chat Chart", which were developed under TB CAP. The Quick Chat Chart is an interactive health chat for general nurses using a one page job aid to address the patients in the waiting rooms of outpatient clinics (see picture below). The aim of the tool is to facilitate conversation between nurses and patients in the waiting room around the subject of tuberculosis.



Quick Chat Chart with suggestions on how to approach patients about tuberculosis and which questions to ask them.

#### **Technical Outcomes**

	Expected	Outcome	Indicator	Baseline	Target	Result	Comments
	Outcomes	Indicators	Definition		Y1	Y1	
1	Increment and improve infection control measures in the selected health facilities	Number of persons trained	100 persons trained in IC in all health facilities		100	70 (52 Female and 18 male)	It was expected to train 10 people per site, but only 5 sites were reached during APA-1, and in some sites more than 10 people were trained according to each site's particular needs.
2	Develop infection control plans	Health units with action plan according to internationally implemented standards	10 health units with implemented plan. Priority will be the big and municipality hospitals	0	10	5	There are 5 elaborated plans but not yet implemented fully as staff of these health facilities will participate in coming period in training to be able to properly implement the plans. The target of Y1 has been adjusted to 5.
3	Reduction of TB infection risk in health facilities.	Health facilities with physical infrastructure in place in 100% selected units.	the same 10 health units will have their adjusted infrastructure in place according to the plan	0	10	5	At the beginning of the project it was estimated a short amount for the refurbishments, the budget was adjusted and only 5 was feasible to do. The other 5 will be done during APA-2

# **Key Achievements**

Infection control committees are established in regional University Hospital José Cabral y Báez de Santiago de los Caballeros (2nd major city in RD). Five health facilities have their IC plan elaborated and health infrastructure refurbished according to plan. In agreement with the NTP KNCV has been incorporated in the National Infection Control Group. IC Training of another 70 health staff of different health facilities will be realized in the coming period by TB CARE I.

It is important to outline that Hospital Cabral y Baéz has reported for 2011, 28 cases of TB among HCW according to NTP, and has the largest amount of HIV patients in the north region of the country. HIV and TB services in Hospital Cabral y Báez were one next to the other in a lower floor and in a narrow hallway (see picture on the right), putting HIV patients at risk, since these patients shared a waiting room with TB patients. A Hospital Stop TB Committee was created within Hospital Cabral y Báez. This committee has led to the elaboration of the IC plans and refurbishment for TB service at this site. In addition, this mobilization has led to the inclusion of a TB CARE I IC Expert in the National Technical Group for Infections Control, led by NTP.



TB Service and HIV Service in a narrowhallway in Hosp. Cabrally Báez



Graphic showing some images of the refurbishments made so far and their geographic location.

## **Challenges and Next Steps**

The next steps for TBCARE I, which will be finalized during APA2, are the following:

Refurbishments for TB IC control in 5 more health facilities.

Establish IC committees in all involved health facilities to monitor and follow up the IC plans. The IC committees will be instrumental in implementing all elaborated IC plans.

Conduct IC Training in 10 selected hospitals where refurbishments are planned to complete the IC training plan.

 $\ensuremath{\mathsf{TA}}$  from KNCV HQ expert will provide guidance for the consolidation of the IC strategy.

# Programmatic Management of Drug Resistant TB (PMDT)

In this technical area, the goals of many activities depended on the inclusion of new technology provided by the planned acquisition of the GeneXpert instruments. Based on evaluations made by NTP and CDC it was concluded that the country does not comply with the minimum standard needed to implement such new technology and the procurement of the GeneXpert machines was postponed. In addition, the evaluation pointed out that the Dominican Republic has sufficient capacity to process the culture, but experiences problems in acquiring the samples.

One huge challenge in PMDT is to improve patient adherence to treatment, the country has not yet developed any strategy for adherence or tools to support patients to be adherent. In collaboration with other partners and TA from KNCV HQ, TB CARE I is involved in a collaborative effort to create the first experiences to improve TB treatment adherence with a patient centered approach.

#### **Technical Outcomes**

	Expected	Outcome	Indicator	Base	Target	Result	Comments
	Outcomes	Indicators	Definition	line	Y1	Y1	
1	Prevention and case management according to international standards	Updated National MDR case management Guidelines	Existing Guidelines need an update to be in line with the latest international standards	0	Updated MDR Guidelines	Updated MDR Guidelines	
2	Increased access to timely diagnostics of MDR TB	Proportion tested patients with rapid test MDR (GeneXpert) out of all suspected MDR patients	Total of MDR suspect patients tested by GeneXpert divided by total of suspected MDR patients in a defined period x 100	0	10%	cancelled	During the international evaluation visit in Nov 2011 it was highly recommended by CDC not to invest in GeneXpert as the basic conditions were present at CRL. Priority should be given to perform quality cultures and DST and after that start to introduce GenXpert. Also the continuous electricity supply should be guaranteed in the CRL before implementing this technology.
3	Increase adherence to treatment in MDR patients	Decrease of a defaulter rate among patients with MDR	defaulter rate in cohort of MDR patients	16%	N/A	N/A	Impact will be only visible at a longer time as the treatment takes 18-24 months. This result depends also on the users of the updated guidelines.

## **Key Achievements**

The MDR guidelines have been updated according to international guidelines. The MDR National Guidelines for treatment and care were updated with technical assistance and financial support provided by TB CARE I. These Guidelines have been validated by NTP and final steps within the Ministry of Health are underway to publish the new guidelines. This was a complex process that included training, consultation and technical assistance from many national and international experts, to meet the international standards.

## **Challenges and Next Steps**

Validation of guidelines is still needed, followed by printing and circulation as well as updating of TB staff.

Integrated TB CARE I initiatives to enhance patient adherence of MDR patients have been undertaken in the last months of APA1 in coordination with other projects. During APA-1 TB CARE I has been working on the collection of information for the development of tools to improve patient adherence of MDR TB patients, through a patient centered approach at the two MDR-TB facilities in the Dominican Republic. As implementation will need a period of time and impact can only be measured in a longer period of time beyond the scope of the project, an agreement has been made with Cicatelli Associates Inc. to coordinate and cooperate and integrate the tools developed by TB CARE I to avoid duplication of efforts and make the best use of these tools.

The Global Fund contracted Cicatelli Associates Inc., a US based NGO to develop an intervention on adherence with 100 prioritized TB Services (which together reach 80% of all TB cases). The Global Fund project will develop 2 approaches: Health system approach and patient centered approach.

Also during APA-2 there will be other activities such as the production of audiovisual materials to support MDR-TB patients in adhering to treatment. This is based on the Photovoices experience, developed during APA-1, with TA from KNCV HQ ACSM expert, Dr. Netty Kamp.

Training of healthcare staff in case management of MDR TB will also be part of APA-2, in order to improve the quality of care and aiming to increase the cure rate.

# **Health System Strengthening (HSS)**

During APA-1 TB CARE I has initiated an approach to Zonas Francas, which is the 2<sup>nd</sup> most important industrial park in the country. Given the conditions of these industrial zones (low ventilation, crowded spaces, and large compounds) it was considered necessary to initiate interventions to increase TB awareness and promote TB services.

The entree to these premises has been difficult initially, since these industries are very strict with working hours and with granting access to the compounds. Through advocacy activities finally an agreement was signed between the industries and TB CARE I, to implement "Quick TB Chats" using the sound system of the compound, so that the employees' didn't have to stop working, and using the private medical service of the industrial park to deliver DOT where needed.

So far over 200 people have received brochures and other information materials, and hundreds have heard the "quick chats". More than 100 employees have written questions for the project about TB, which were used to develop an information package for similar industries.

#### **Technical Outcomes**

	Expected	Outcome	Indicator	Bas	Target	Result	Comments
	Outcomes	Indicators	Definition	e line	Y1	Y1	
1	Improve TB timely diagnostics and notification by private health services, focusing on zona franca factories, independent medical cabinets and private clinics.	Contribution to notification of TB cases by these targeted providers	Number of TB cases referred to TB Services from the Zona Franca	N/A	5%	N/A	There was an agreement between TB CARE I and one of the Zonas Francas and some activities have been developed, but there is little information yet about the contribution at this early stage.
2	Increase of technical and managerial competencies in TB at all levels from central, regional, provincial and local level	Proportion of regional directors, provincial and health areas who elaborate TB annual action plans based on situational analysis out of all trained directors.	Meetings realized at Health Areas and Provincial level for the epidemiological analysis and the development of an action plan within project 's selected provinces.	0	90%	75% ( % regional directors who participat ed in the meetings who included TB in annual plans	Meetings were suspended by NTP, because they were considered not costeffective by them.

One indicator on stop TB committees was put under Universal Access. During the implementation of the project the activity developed in the direction of universal access and it would be repetitive to keep it here.

## **Key Achievements**

Together with the NTP, TB CARE I trained 1,043 people active in TB control at all levels in the Stop TB Strategy, which was developed by the NTP with support of TB CAP. Each 2 or 3 day training was tailor-made to the level of the groups to be trained. These trainings took place in all provinces and health areas of the TB CARE I project. This is the project's most important activity, since it increased the technical and managerial competences in TB at all levels.

The trainings took place in the following areas:



Area/Province	No.
CENTRAL Level	40
AREA I	40
AREA II	36
AREA III	41
AREA IV	69
AREA V	71
AREA VI	33
AREA VII	59
AREA VIII	53
MONTE PLATA	40
SAN CRISTOBAL	40
PERAVIA	0
SANTIAGO	111
PUERTO PLATA	116
DUARTE	46
BAHORUCO	37
SAN PEDRO DE MACORIS	46
LA ROMANA	0
SAN JUAN DE LA MAGUANA	37
ELIAS PIÑA	41
AZUA	87
TOTAL	1043

Source: TB CARE I (KNCV/USAID)

Legend:

No training organised

All staff directly involved in TB control trained

50% of staff directly involved in TB control trained

Areas not under TB CARE I

Map of the country, showing the provinces where TB CARE I organized training for people involved in TB control

Partnerships and significant agreements have been performed for TB control. Agreements with San Pedro de Macoris free trade zone ("zonas francas"), to improve timely diagnostics and notification of TB suspects and TB cases in partnership with private sector.

Another key element in HSS has been the performance of 156 supervision visits by TB CARE I supervisors to TB services in Project's prioritized provinces. A tool for follow up was developed by the project and written feedback is given to the services, allowing them to adjust and improve in the 6 areas of focus of the supervisions: 1. Management; 2. Diagnose, treatment and patient follow up; 3. HIV/TB Coinfection; 4. Prevention and control of MDR; 5. Laboratory; 6. ACSM.

DPS/ÁREA	No. of sites that received supervision visit	Total no. of sites in the area	% of sites supervised	No. NTP prioritized sites	%
Region 0	31	40	77,50	36	86,11
Área I	6	21	28,57	9	66,67
Área II	3	12	25,00	6	50,00
Área III	4	23	17,39	3	133,33
Área IV	1	40	2,50	6	16,67
Área V	4	24	16,67	5	80,00
Área VI	1	9	11,11	3	33,33
Área VII	3	15	20,00	4	75,00
Área VIII	9	22	40,91	4	225,00
Monte Plata	7	5	140,00	4	175,00
San Cristobal	1	40	2,50	6	16,67
Azua de Compostela	24	26	92,31	2	1200,00
Bahoruco	9	37	24,32	0	N/A
Elias Piña	14	27	51,85	1	1400,00
Puerto Plata	15	54	27,78	4	375,00
Santiago	13	84	15,48	14	92,86
Duarte	8	83	9,64	0	N/A
La Romana	3	18	16,67	3	100,00
Peravia	1	40	2,50	3	33,33
San Juan de la Maguana	18	78	23,08	2	900,00
San Pedro de Macoris	12	46	26,09	2	600,00
TOTAL	156	704	22,16	81	192,59

Supervisions during APA-1 in Project's Selected Provinces

# **Challenges and Next Steps**

Regarding the agreements, we still have to complete activities at the free trade zones in San Pedro de Macoris to cover all as intended and also advocate to increase the involvement of the regional health manager. TB CARE has partnered with the HIV Program, which already has an initiative undergoing with "zonas francas" to expand this partnership and include the Ministry of Labor.

Integrate the TB CARE I Supportive Supervision Methodology with the supervision guidelines used by NTP central level. Project's tools are focused on provincial and facility use, which makes them very user friendly and widely used. However, new more extended and complicated tools were designed for central follow up. Agreement on what tools to use and for which purpose, remains a challenge for APA-2.

# Monitoring & Evaluation, Surveillance and OR

#### **Technical Outcomes**

	Expected	Outcome	Indicator	Base	Target	Result	Comments
	Outcomes	Indicator s	Definition	line	Y1	Y1	
1	Strengthen quality of TB information system at all regional and provincial levels	Periodical Sessions of data analysis in provinces and areas	Number of sessions realized divided by number of provinces	N/A	20	9	KNCV staff has contributed to the improvement of the quality of data through supervision and training of TB coordinators in most of project's provinces. It was not possible to perform in all 20 due to changes of staff that occurred during APA-1 that hindered the proper conduct of visits to the health areas and provinces for the suitable data analysis.
2	Feedback with relevant TB epidemiologi c information to all regional and provincial levels.	Biannual statistical Bulletin elaborated and distributed to provinces	Production of epidemiological bulletin to be distributed to all provinces, making data available for the decision making and feedback to TB coordinators at the provincial and regional levels.	N/A	2	1	There has been a delay in the elaboration of the former bulletin due to several factors. As a result, it was decided to produce a yearly bulletin.
3	Enhance and facilitate the information access of TB to all interested public	Created and Updated TB web page	Creation of a website to host NTP information and platform to interact with Tb coordinators and provide access to general population to relevant TB information.	N/A	1	Cancelled	NTP did not consider this anymore important as the existing page has been updated with GF support. KNCV supported with relevant data and information to be published.

# **Key Achievements**

First yearly epidemiological bulletin 2011 has been successfully produced and distributed among provinces. Most provinces and areas were supported through the supervision visits and improved their data. TB CARE I also provided TA and support to NTP in the data collection and validation of information for the "quarterly operational reports". During this process TB staff and HWC receive training on the spot on how to collect the information from the local levels and compile for central level.

## **Challenges and Next Steps**

Turnover of project staff during the project year was an obstacle to accomplish all planned visits, prioritizing those with major difficulties.

Also getting the validation and authorization to publish the data for the epidemiological bulletin delayed the publication.

Data quality assurance is critical. TB CARE I has faced a lot of problems when it comes to formulating the TB CARE I quarterly report, because of the weakness in the quality of the data. Major effort has to be done by the project staff to search for the data at the points of service and this is not cost effective or sustainable. TB CARE I is participating in NTP's Supervision Technical Group, this Technical Group was created to address data quality issues, it is integrated by all TB partners with the participation of M&E Officers.

#### **Technical Assistance**

TB CARE I has provided TA in the various components of the project to other partners in the country. As a result, members of TB CARE I Country Technical Team are invited to the different technical groups of the NTP: Surveillance, Infections Control, ACSM and PMDT.

Also, the project has received valuable TA from KNCV HQ, providing mentorship to young professional members of the local staff and contributing to the planning and implementation of the project's main activities. Particularly in ACSM, the country had not experienced before so much attention to these activities and now there is evidence of the good effect of using ACSM methodology to promote, inform and provide quality care to patients with TB.